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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/617,717	07/14/2003	Antony Howell	1507 US	4193

20346 7590 08/31/2004

KEY SAFETY SYSTEMS, INC.
PATENT DEPARTMENT
5300 ALLEN K BREED HIGHWAY
LAKELAND, FL 33811-1130

EXAMINER

DONOVAN, LINCOLN D

ART UNIT	PAPER NUMBER
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2832

DATE MAILED: 08/31/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/617,717

Applicant(s)

HOWELL, ANTONY

Examiner

Lincoln Donovan

Art Unit

2832

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 July 2003 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Information Disclosure Statement

The information disclosure statement filed 12-15-03 fails to comply with 37 CFR 1.98(a)(1), which requires a list of all patents, publications, or other information submitted for consideration by the Office.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3, 7-9, 11, 13 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hufgard et al. [US 6,060,969] in view of Mancusi, Jr. [US 3,924,631].

Regarding claims 1, 7, 9, 13 and 16, Hufgard et al. discloses a contactless proximity switch [figure 1] comprising:

- a hinge assembly having a base portion [1] and an arm portion [2] extending over the base portion;
- a magnetic field sensor [7] mounted within a cavity to the base portion;
- and
- an activation magnet [9] mounted within a cavity to the arm portion.

Hufgard et al. disclose the instant claimed invention except for the specific structure of the hinge assembly.

Mancusi, Jr. discloses a magnetic clamp having a u-shaped hinge structure [figure 1] formed of a single plastic piece having a base portion [12] connected to an arm portion [10] biased from the base portion via a flexible section [14].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the hinge design of Mancusi, Jr. for the hinge of Hufgard et al., for the purpose of facilitating assembly.

Regarding claims 3 and 11, Mancusi, Jr. discloses the thickness of the flexible section being approximately one half that of the base portion and extending outwardly thereof in the engaged state [figure 1].

Regarding claims 8 and 17, Hufgard et al., as modified, disclose the instant claimed invention except for the specific material used for the hinge assembly.

The use polypropylene for the hinge assembly would have been obvious as a well known material to provide the necessary resiliency and strength.

Claims 2, 4-6, 10, 12, and 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hufgard et al., as modified, as applied to claims 1 and 9 above, and further in view of Forsythe et al. [US 6,175,290].

Regarding claims 2 and 10, Hufgard et al., as modified, disclose the instant claimed invention except for the use of a stop means on the hinge assembly.

Forsythe et al. disclose a magnetic sensor switch including a movable magnet [70] mounted to an arm [66] including stop means [42] thereon.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include stop means on the hinge assembly of Hufgard et al., as modified, in order to prevent overtravel of the arm.

Regarding claims 4 and 12, Hufgard et al., as modified, disclose the instant claimed invention except for a fastener hole being mounted on the hinge assembly arranged such that the arm does not extend thereover.

Forsythe et al. further discloses a fastener hole [54a-b] mounted on the assembly arranged such that the arm does not extend thereover [figure 2].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the fastener hole design of Forsythe et al., in Hufgard et al., as modified, for the purpose of securing the hinge assembly to a mounting surface.

Regarding claims 5-6 and 14-16, Hufgard et al., as modified, disclose the instant claimed invention except for the specific type of magnetic sensor used.

Forsythe et al. discloses the use of reed switches and/or Hall sensors cooperating with the magnet [column 4, line 66-column 5, line 16].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use reed switches or Hall switches for the sensor of Hufgard et al., as modified, in order to sense the magnetic field.

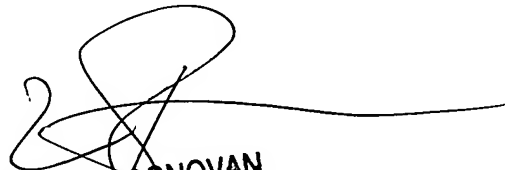
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lincoln Donovan whose telephone number is (571) 272-1988. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin Enad can be reached on (571) 272-1990. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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